UC San Diego Jacobs School of Engineering

BEARTERLY NEW SLETTER OLUME 2. ISSUE 3. WINTER 2016

10°(ENGINEERING)

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ENGINE

Jack Wolf Recipient 4.0 IDEA Scholars E-Week 2016 Recap Grad Student Spotlight Alumni Spotlight Where Are They Now?

2eU

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San Diego



INTRODUCING... Shane models Idea student center Student life coordinator

What TV shows are you currently into?

Better Call Saul, Walking Dead, & Vikings with the occasional Grey's Anatomy (there are so many seasons!)

What does the IDEA Student Center mean to you?

The IDEA Center, to me, is the heart of JSOE. As is true of any heart, our energy is devoted to building meaningful relationships with and among students. A heart is also hopeful, as this is a place both for memories for envisioning a future of what engineering and our engineers will one day become. At the IDEA Center, we specialize in crafting a human experience, attuned to social justice, in a field that studies machines, mathematics, & coding. At least what's what I tell people when they ask me what I do and where I work.

Anything else you would like to share with our readers? I play rugby and am an artist. Come to a game or to a show sometime!



PHOEBE CONTRERAS-JONES

First recipient of the Jack Wolf Endowed

Scholarship Award

The Jack Wolf Scholarship provides annual scholarship support up to five years for the top outstanding incoming undergraduates majoring in electrical and computer engineering who show the potential to excel.

Q: You are the first student to receive this award, what does receiving the scholarship mean to you?

Receiving the scholarship was and is a huge honor. I was stunned and ecstatic to find out that I was the recipient. Financially, the scholarship helps me out immensely; it allowed me to significantly reduce the amount of loans I was taking out and therefore one less thing to worry about. On top of it being a financial blessing, it is encouraging. It makes



Image: Prof. Tara Javidi & Phoebe

me want to strive to do even better. After freshman year, I was worried that I would be lost in the crowd. But after receiving the Jack Wolf Scholarship, I saw so many doors open. I was able to meet the donors, Toby Wolf, Jack Wolf's widow and Roberto Padovani, Jack Wolf's colleague and friend. Meeting them and learning about Jack Wolf only made the scholarship that much more personal. I am deeply humbled to receive such an honor. It is a blessing and has inspired me to strive for my absolute best.

A Word from Professor Tara Javidi, Department of Electrical and Computer Engineering and Phoebe's Mentor

I got to first meet Phoebe at a recruitment event when she was considering various colleges. I have been her faculty mentor since her joining UCSD. While Phoebe had to struggle with adjusting to a new environment and the heavy academic load in engineering, she has been on a high achievement path since Summer 2015. She is a real fighter, the sort of student we are proud to have and would like to encourage. I was especially proud and happy to hear that Phoebe has received the first Jack Wolf Scholarship. Professor Jack Wolf was a truly exceptional educator, researcher and colleague in ECE who also was an exemplary mentor for me during my first few years at UCSD.

Read the rest of the Q&A with Phoebe by visiting: tinyurl.com/jackwolf2016



CONGRATULATIONS to the freshmen IDEA Scholars who obtained a 4.0 GPA in their first quarter!

10 GU

Gunawan Makmur | NanoEngineering

"The most helpful resource I have is my seniors and peers who gave me vital advice on how to study the class materials effectively and efficiently. Therefore, the friends I made through the Summer PrEP are my most valuable resources."

Cory Wolf | Mechanical Engineering



Josef (Niels) Griedel | Aerospace Engineering Now in his second year at the Jacobs School of Engineering, we asked Niels to reflect back on his

first year as an engineering student. Niels was one of the IDEA Scholars who achieved a 4.0 GPA in the first quarter of his freshman year.

"The last year has been significantly more challenging. It really feels like I'm learning a lot. I've learned good study habits, and been able to reach my full potential by really applying myself to a education goal. I've learned how to budget time, and money."

"I'm currently working towards a space shot in Triton Rocket Club. I'm also developing a 3-D printed prosthetic hand for a child in need. I've learned to be persistent and ask around to get a position. Don't wait for it to come to you."

E-week is TESC's (Triton Engineering Student Council) annual celebrat:

E-week is TESC's (Triton Engineering Student Council) annual celebration of National Engineers Week. Visit tinyurl.com/Eweek2016Recap for more info!

















inyurl.com/Eweek2016Recap























IDEA Student Center | Winter 2016 | 4

Jordan Campbell

Materials Science and Engineering, PhD Candidate Research: Simulation of Diffusion in Iron-based Amorphus Metals Faculty Advisor: Prof. Olivia Graeve, Mechanical and Aerospace Engineering

> GEM Fellowship Recipient, The National GEM Consortium ENG POSSE Mentor for the IDEA Student Center

Undergrad Institution: Moorehouse College | Atlanta, GA Major: &S in Chemistry, Mathematics Minor Hometown: Maryland, New York

Congratulations! Dr. Tara Javidi and Dr. Todd Coleman





Recipients of the 2015 UC San Diego Equal Opportunity Affirmative Action and Diversity Award

The October 2015 announcement of the awards program invited and encouraged nominations to recognize those individuals, departments, organizational units and students who have made outstanding contributions in support of UC San Diego's commitment to diversity. We are thankful for the many contributions they have made and continue to make.

Both Professor Javidi (Electrical Engineering) and Professor Coleman (Bioengineering) serve on the IDEA Student Center Faculty Board.



The "Program on Student Success in Engineering" (POSSE) is an academic year long supplemental academic program designed to encourage high school youth to pursue college and a degree in Science, Technology, Engineering, and/or Math (STEM).



The program, hosted by the IDEA Student Center of the Jacobs School of Engineering at UC San Diego, combines project-based learning along with personal mentorship from graduate engineering students. Although the emphasis of the curriculum is on STEM, our ultimate goal is to build and develop student's critical thinking skills, analyze and question problems, and provide students with the ability to solve novel solutions in a creative way that expands all fields of interest and is applicable everyday.

We also want to build a "posse" of diverse learners, whereby students work together as a team and support and encourage one another, all while having fun!

Congratulations to Dr. John Slaughter, co-editor of the newly release book Changing the Face of Engineering: The African-American Experience (John Hopkins University Press. Dr. Slaughter received his doctorate degree from UC San Diego, Jacobs School of Engineering.



Slaughter, who has a joint appointment at the USC Viterbi School of Engineering and spent two decades as an engineer before going on to become the first African American director of the National Science Foundation, argued that the contributions made by African Americans to the field of engineering are frequently underrepresented and, consequently, undervalued. Moving forward, Slaughter said he hopes readers of Changing the Face of Engineering will not only educate the public about the many contributions African Americans have made, but also encourage young African Americans to consider pursuing a career in engineering. Slaughter has spent his long and distinguished career bridging the intersection between education and engineering. After working as an electrical engineer, he was appointed director of the National Science Foundation in 1980, the first African American to hold the position. He then went on to serve as president of Occidental College for 11 years before joining USC, where he now holds a joint appointment with the Viterbi School of Engineering.

age: Dr. John Slaughter, USC

Excerpt and image from: http://rossier.usc.edu/john-brooks-slaughter-receives-chairmans-award-from-great-minds-in-stem/

NOV? SPOTLIGHT ON RECENT IDEA SCHOLAR ALUMNI



NAME Rene Martinez MAJOR Chemical Engineering CLASS OF 2015 CURRENT EMPLOYER Northrop Grumman



I am a Materials and Process engineer, I make sure that all of the materials are up to specification and the processes are written clearly and being performed properly.

What did you learn in college that's coming in real handy for you now as an engineer?

The hands on group projects I worked on were most useful for my career. Also MAE 170 was very helpful, as I write many technical reports very similar to the format expected in MAE 170.

What words of advice would you like to share with current engineering students?

I would suggest getting involved in clubs, projects, research or if possible internships. The earlier that you can start applying your engineering knowledge the earlier that you can figure out what it is you want really interests you and gives you a better appreciation for you classes.

What does the IDEA Student Center mean to you?

The IDEA Student Center to me was a great way to meet engineers from different disciplines and was extremely helpful in getting me the experience I needed to help with my career and also provided guidance when needed.

SPOTLIGHT NO. 2

NAME Kristoffer Wilkerson

MAJOR Electrical Engineering

CLASS OF 2015 CURRENT EMPLOYER Tortuga Logic, Inc



What do you do at your company?

As a software engineer at Tortuga Logic, I am responsible for a variety of tasks ranging from developing new features for our hardware security testing and verification tool, designing and deploying new features, and also customer support for our tool.

What has been the highlight of your professional career so far?

The best part of working in a small agile team would be the opportunity to wear multiple hats as a team member, presenting new and unique challenges every day. This also gives various opportunities to network and interact with other industry professionals, an opportunity which may not necessarily be as accessible for the same position at a larger company.

What did you learn in college that's coming in real handy for you now as an engineer?

My bachelor's degree in Electrical Engineering gave me the necessary skills to understand what our tool accomplishes for hardware security. However, I would say that the ability to quickly learn, understand, and apply engineering concepts was the keystone for how my college experience has helped me as an engineer in industry. These skills allowed me to adapt to a new field and learn new skills as a software engineer.

What words of advice would you like to share with current engineering students?

Never stop learning, both during your college career and after. Acquire some new technical skills on the side, read some research papers relevant to your interests, or even dabble in the intersection between STEM fields and the arts. You never know where learning something new will take you further along in your career.

What does the IDEA Student Center mean to you?

The IDEA Student Center was the first resource center I encountered at UCSD as an incoming freshman. It was the center which inspired me to challenge myself and pursue new opportunities, and it provided me with a network of friends and professionals I could always reach out to for any situation. Personally, the center provided some sort of home on campus as a student. Undoubtedly, I would not be where I am today without their support and their wealth of resources.

UC San Diego Jacobs School of Engineering

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